

210 Analyzer Engineering Specifications

Measuring Range:

| pH | 0 to 14 pH units |
|----------------------------------|---|
| ORP: | -2000 to +2000 mV |
| Conductivity: | 0.55 μS/cm to 1 S/cm |
| Resistivity: | 0 to 20 MΩ·cm |
| TDS: | 0 to 100,000 ppm or mg/L Total Dissolved Solids |
| NaOH: | 0 to 15 % by weight |
| NaCI: | 0 to 20 % by weight |
| H ₂ SO ₄ : | 0 to 25 % or 94 to 100 % by weight |
| HCI: | 0 to 18 % by weight |
| Salinity: | 0 to 42 ppt (‰) or PSU [TC Seawater curve] |

Output Scale Expansion:

Zero anywhere from, 0 to 90%. Span anywhere from, 10 to 100%. Zero and Full Scale, reversible.

Accuracy: Standard deviation ± 0.1% of range. Display Precision: ± 1 digit. Repeatability: ± 1 digit. Stability: ± 0.01 % per day.

Temperature Coefficient:

Input: ± 0.003 %/°C. Output: ± 0.006 %/°C.

Temperature Measurement:

-25 to +260°C (-13 to +437°F), Pt1000 RTD.

Response Time:

90% within 3 seconds (default), function of flow/temperature. *Damping Adjustment:* 0 to 99 seconds.

Calibration

pH Calibration: Single buffer and two buffer calibration with auto recognition of IC Controls NIST traceable buffers. Custom value buffer, grab sample calibration.

Conductivity Standardization: Single-standard calibration with autorecognition of standards. Custom value standard, grab sample calibration, air zero calibration.

Temperature Standardization: Direct entry of temperature correction.

Display: Back-lit Dot Matrix (Graphical)

Process Variable Characters, 1.13 cm (0.45 inch) high, for primary measurement, secondary characters, 0.75 cm (0.3 inch) temperature, efficiency, errors, prompts and diagnostic information. 4 alarms

Signal Outputs:

Two (2) 4 to 20 mA, continuous, assignable, programmable, isolated, max. load 600 ohms.

Programmable non-linear characteristic that is graphically displayable: one for acid control with valve or acid titration curve correction, the second for caustic control with separate valve or caustic titration curve. Or your process curve.

Four (4) relays

1-3 SPST Form A, epoxy sealed ,normally open contact 4 SPDT, Form C, epoxy sealed contacts

Rated 115 V 5 Amps Resistive, 3 Amps Inductive

230 V 5 Amps Resistive, 1.5 Amps Inductive 28 VDC 5 Amps Resistive, 3 Amps Inductive

Relay Functions:

| Alarms Three inde | ependent, assignable, programmable |
|----------------------|---|
| Assign to: primary n | neasurement, temperature, timer, ON/OFF control. |
| Actions: | high, low, deviation |
| Adjustments: | Set-point; 0 to 100% of units; |
| - | Differential; 0 to 10 % of units. |
| | Delay; 0 to 9999 seconds. |
| Unit Selection: | °C/°F Temperature. |
| Override: | Press "Manual" key, 15 minute OFF. |
| ON/OFF: | Can be set to permanent OFF. |
| Indication: | LCD "flashing" the alarm, relay contact, and serial |
| | |

Fault Alarm One independent, assignable, programmable Assign to: Sensor and/or Analyzer and/or Process.

Indication: LCD "flashing" the alarm, relay contact, and serial output. *Timer* Programmable cleaning or override timer function allows time based automated cleaning of a sensor plus hold of outputs during cleaning and recovery period. Uses one relay.

Advanced Functions:

Intelligence and Real-time Clock (Communication Protocol Module & Program Recommended) Internal 1000 point history: Measurement, temp, time, date. Last 12 calibration history: time, date, calibration record. Last 20 event record: time, date, power ON/OFF, error & caution messages, alarm, off-scale. Real-time Clock: internal year, month, day, hour, minute, second; maintains date even when power is off.

Communication Protocol (optional alternatives) -21 RS485 (RS232 compatible) for communication with PC

Universal Ratings: Environment Ratings

Operating Temperature Range: -20 to 60°C (-4 to 140°F) Relative Humidity: 95% maximum, non-condensing. Extended Environment Rating: IP66 (NEMA 4X) corrosion resistant. Pollution Degree: 2 Installation Category: II

Electrical Requirements

115/230 VAC \pm 10%, 0.25 Amp., 50/60 Hz, 50 Watts. 20 to 30 VDC, 50 Watts

Electrical Classification - General Purpose

Enclosure: Panel mounts in Standard 138 x 138 mm cutout. Epoxy Painted white aluminum case and door. Front Panel orange membrane keypad with tactile feedback. 144 * 144 * 140 mm, DIN size (5.7 * 5.7 * 5.5 inch)

Weight/Shipping Weight: 1.8 kg / 2.2 kg (4 lb / 4.8 lb)